PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Barni, Meghan M.
Serial Number:	10/775,466
Filing Date:	February 10, 2004
Art Unit:	3623
Examiner:	Jarrett, Scott L.
For:	**Method and computer system for schedule bidding**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

DECLARATION OF MEGHAN M. BARNI

I, the undersigned, Meghan M. Barni, declare and state under 37 CFR 1.131 that:

1. I am the named inventor of the subject matter of the above-identified application. At all relevant times herein, I was a systems engineer for IEX Corporation, the assignee of this application.

2. I conceived the subject matter described and claimed in the above-identified application in the United States in 2002. A written description of the subject matter was set forth in an IEX Functional Specification titled "TotalView WebStation Schedule Bidding" Enhancement No. 23002 that I drafted in 2002. Representation portions of this functional specification are attached hereto as Exhibit 1. These portions correspond to the subject matter described and claimed in the above-identified patent application. Some portions of the specification have been redacted to preserve confidentiality.

3. The computer programs that implemented the Schedule Bidding feature as described in the above-identified functional specification were written by IEX employees in the United States and in accordance with the specifications that I wrote. The Schedule Bidding feature was released by IEX in the United States in TotalView Software Release 3.5.1, no later than April 24, 2003. A copy of the relevant portion of the Release Note is attached as Exhibit 2. Although I did not author the Release Note myself, I am familiar with the information in the Release Note and it is true and correct. Portions of this document have been redacted to preserve confidentiality.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

By: Meghan M. Barni

Meghan M. Barni

EXHIBIT 1

TOTALVIEW®

WebStation Schedule Bidding

ENHANCEMENT 23002

FUNCTIONAL SPECIFICATION

Version 1.0

, 2002

IEX
A TEKELEC COMPANY

TotalView Project Manager _____ Date _____

Accepted:

_____ Date _____

Revision History:

Date	Doc. Version	Author
/02	Preliminary	Meghan Barni
/02	Version 1.0	Meghan Barni

Customer Contact(s):

Customer	Contact Name	Phone	Fax	Address

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1 Product Enhancement Request

What is the issue that you are trying to address with this request?

Agents should be able to enter their bids for schedule patterns in the Agent WebStation. A process should then be run which assigns agents to patterns, based on their bids and each agent's seniority or rank.

Supervisors must be able to see, modify, and delete pattern bids.

2 Summary

2.1 Agent Bidding

When the user is satisfied with a set of schedule patterns, he/she may open the patterns for agents to bid on in the Agent WebStation.

A dialog similar to the Print Schedule Patterns dialog will be displayed when releasing a set of schedule patterns. As when printing schedule patterns, the user will specify the fields that will be displayed, the exceptions for which information will be available, and the days of the week for which agents may see schedule patterns. In addition, the user will specify a date range for which the patterns will be available for bidding in the Agent WebStation.

Unlike the report options, the user will not specify a format for the report, filtering criteria, or the sorting method to use.

Agents will log into the Agent WebStation and retrieve the sets of schedule patterns that are currently open for bidding in his/her MU. Only the sets of schedule patterns that are available to the agent will be shown. The agent will be able to rank each weekly pattern that is available to him/her.

The supervisor will be able to indicate which agents may bid on which patterns by specifying the pattern types that each agent may see in the WebStation. In addition, agents may only bid on schedule patterns that are assigned the same agent data value as they are. That is, when an agent logs into the Schedule Bidding module in the Agent WebStation, he will only see a schedule pattern if it is assigned the same agent data value as he is (for the Schedule Bidding agent data group), and if it is assigned one of the pattern types that he is allowed to see.

Agents will be able to update their bids as often as they like until the bid is closed.

2.2 Agent Assignment

Once the schedule pattern set is closed for bidding, the supervisor will initiate a process that will assign agents to schedule patterns based on their bids and on the ranking method selected by the user.

The user will select the agents that are to be included in this processing, and the user will indicate whether or not those agents' previous assignments are to be removed.

The system will only assign an agent to one schedule pattern during the batch assignment process. The user will have indicated whether or not to force an assignment for each of the selected agents. Assignments may be forced if an agent did not enter any bids or if all of the schedule patterns for which the agent did enter bids have been assigned to other agents.

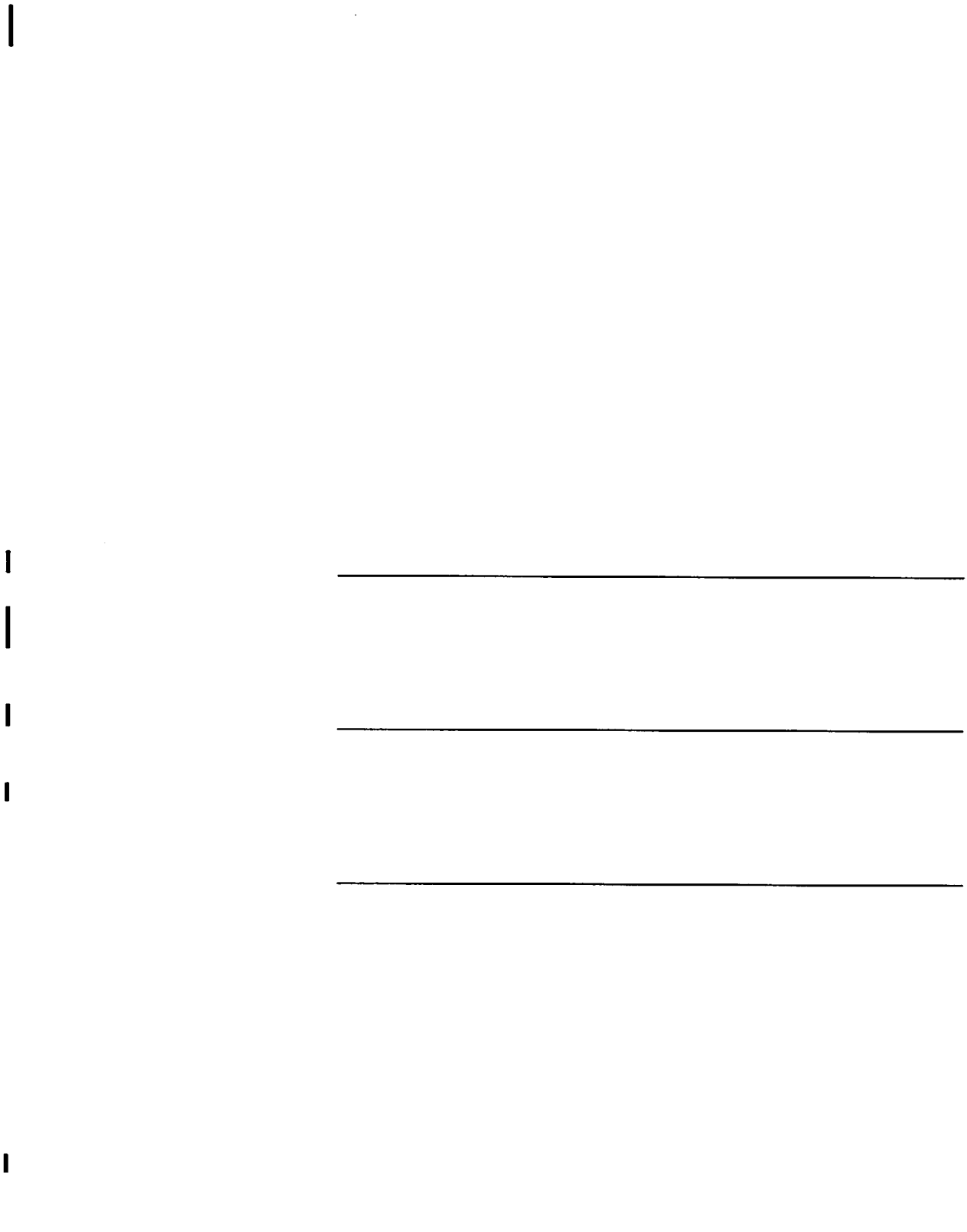
Reports will be available that show the agent bids and the agent assignments.

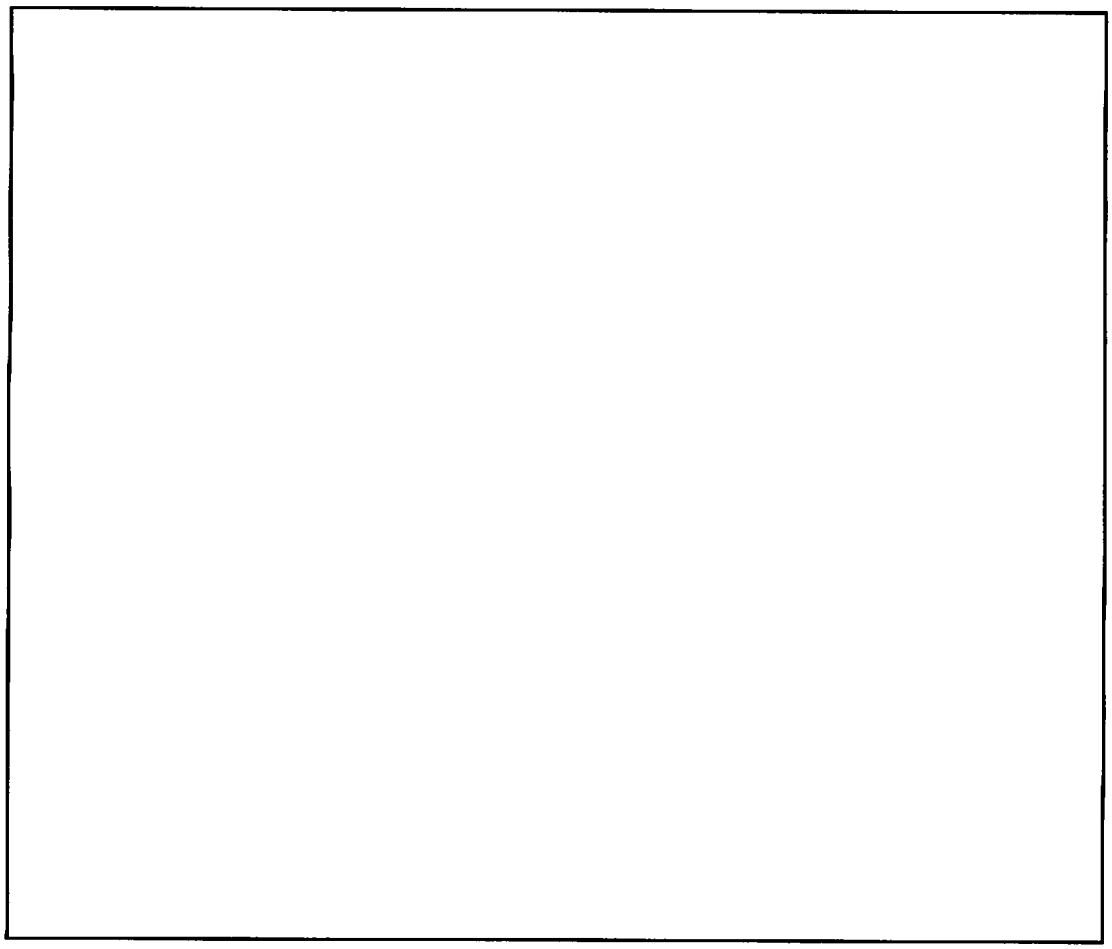
3 Data Items

This section describes the data items that are added or modified by this feature. Each item listed in each of the following tables is a description; the mapping to actual database tables and fields is left to the implementation.

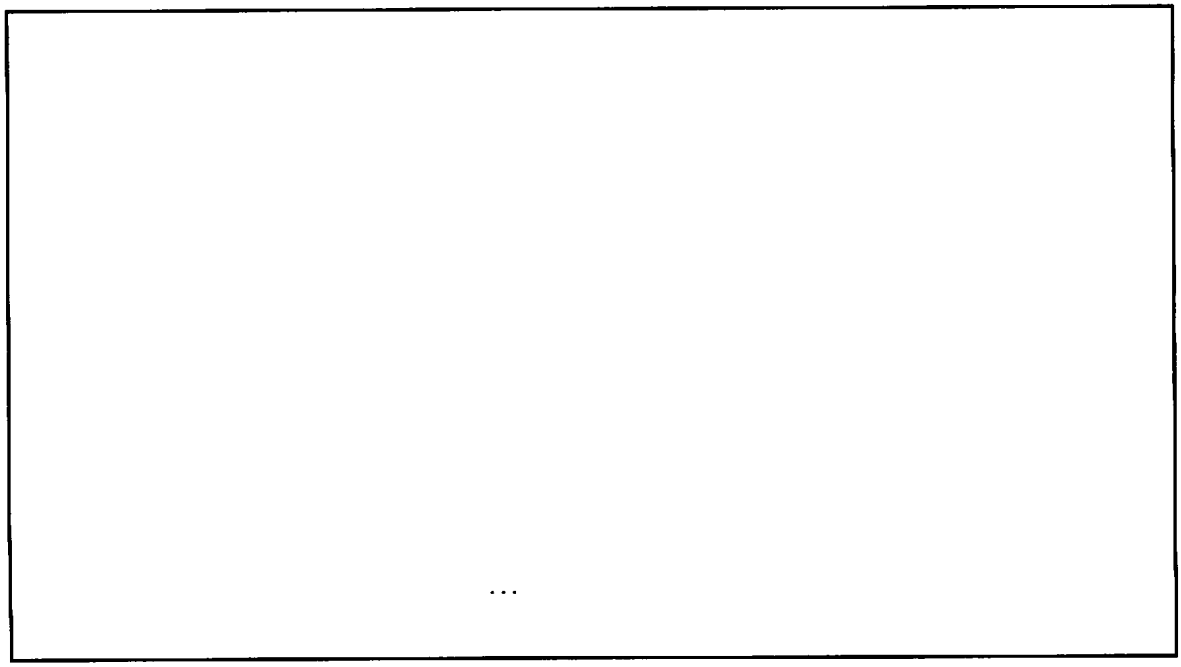
4 Configuration User Interface

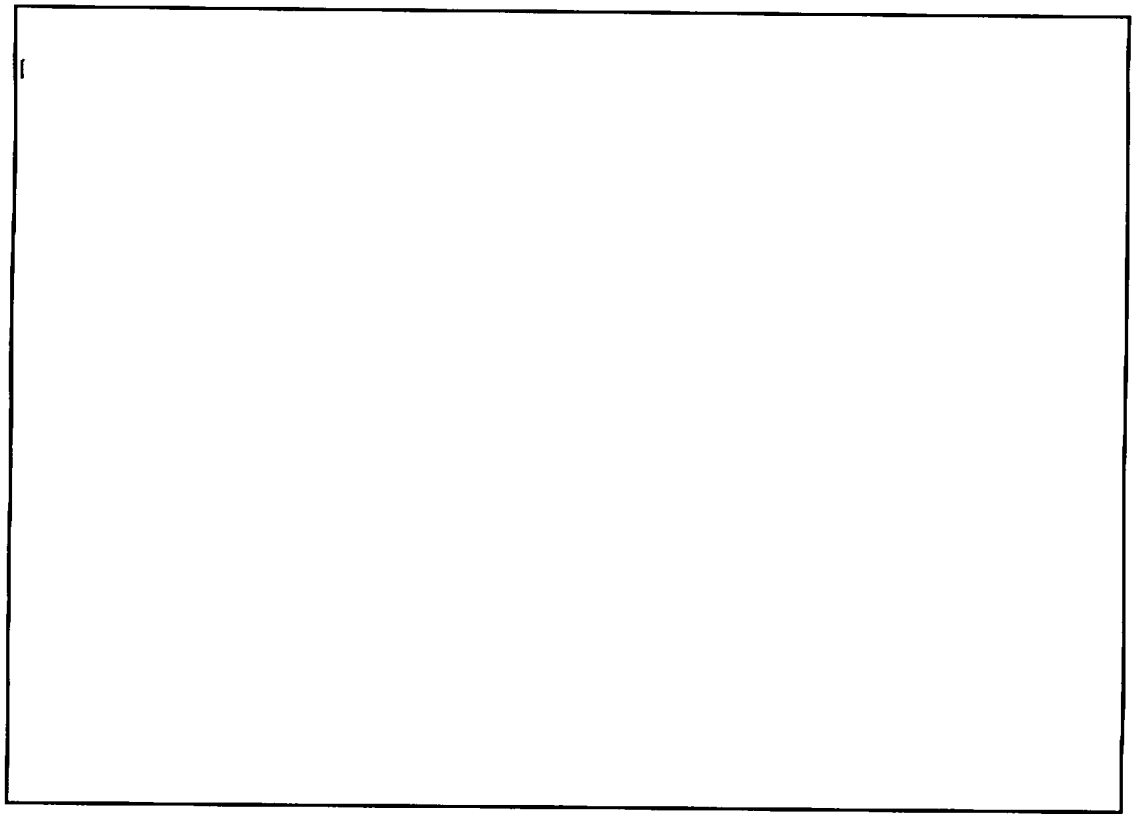
5 Server Processing





6 Workstation User Interface





6.6 Assign Agents Dialog

This dialog will be displayed when the user selects the MU>Schedule Bidding>Assign Agents menu item. The Assign Agents process will be initiated from this dialog. [23002.wks.AA.NewDlg]

6.6.1 Initial View

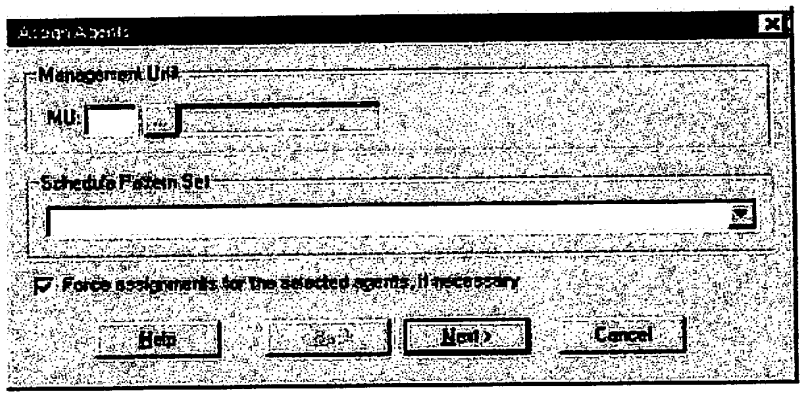


Figure 23 - Assign Agents Dialog - Initial View

6.6.1.1 Field Specifications

MU ID / name

- *Description* - The ID and name of the MU. The name will be populated automatically when the user selects a valid MU ID. [23002.wks.AA.MU]
- *Data Type* - Integer for the ID, String for the name
- *Alignment* - Left
- *Access Restrictions* - None
- *Maximum Width* - 4 for the ID, 20 for the name
- *Data Requirement* - Mandatory
- *Possible Values* - Any MU for which the logged-in supervisor has Modify permission
- *Default Value* - The logged-in supervisor's preferred MU. If no preference exists, then this field will be blank by default.

Schedule Pattern Set

- *Description* - This is the schedule pattern set that contains the weekly schedule patterns that agents are to be assigned to. [23002.wks.AA.PatternSet]
- *Data Type* - Combo box
- *Alignment* - Left
- *Access Restrictions* - None
- *Maximum Width* - 80 characters
- *Data Requirement* - Mandatory
- *Possible Values* - The names of all schedule pattern sets that have been defined for the selected MU will be listed in this combo box. If no valid MU has been selected, then this combo box will be empty.
- *Default Value* - Blank

Force assignments for the selected agents, if necessary

- *Description* - If this field is checked, then all of the agents that are selected will be assigned to one schedule pattern, including agents for whom no pattern bids were entered. (This includes agents who did enter bids, but whose preferred patterns have all been assigned to agents higher in the seniority list.) If this field is not checked, then only the agents for whom pattern bids exist will be assigned to a pattern.
- *Data Type* - Checkbox
- *Access Restrictions* - None
- *Data Requirement* - Optional
- *Default Value* - Unchecked

Help

- *Description* - Pressing the Help button will display on-line help for this dialog.

Back

- *Description* - This button will be disabled in this view of the Assign Agents dialog

Next

- *Description* - Pressing the Next button will validate the data. If no Mu has been selected, then the following message will be displayed. "The MU ID is a required field." The message box will have a warning icon and an OK button.

If no schedule pattern set has been selected, then pressing Next will display the following message. "The schedule pattern set is a required field." The message box will have a warning icon and an OK button.

If the validations pass, then the Select Agents view of the Assign Agents dialog will be displayed.

Cancel

- *Description* - Pressing Cancel will close the dialog box; no agents will be assigned to patterns.

6.6.2 Select Agents View

In this view of the dialog, the user will choose the agents that are to be assigned to weekly schedule patterns for the selected pattern set. [23002.wks.AA.SelectAgts]

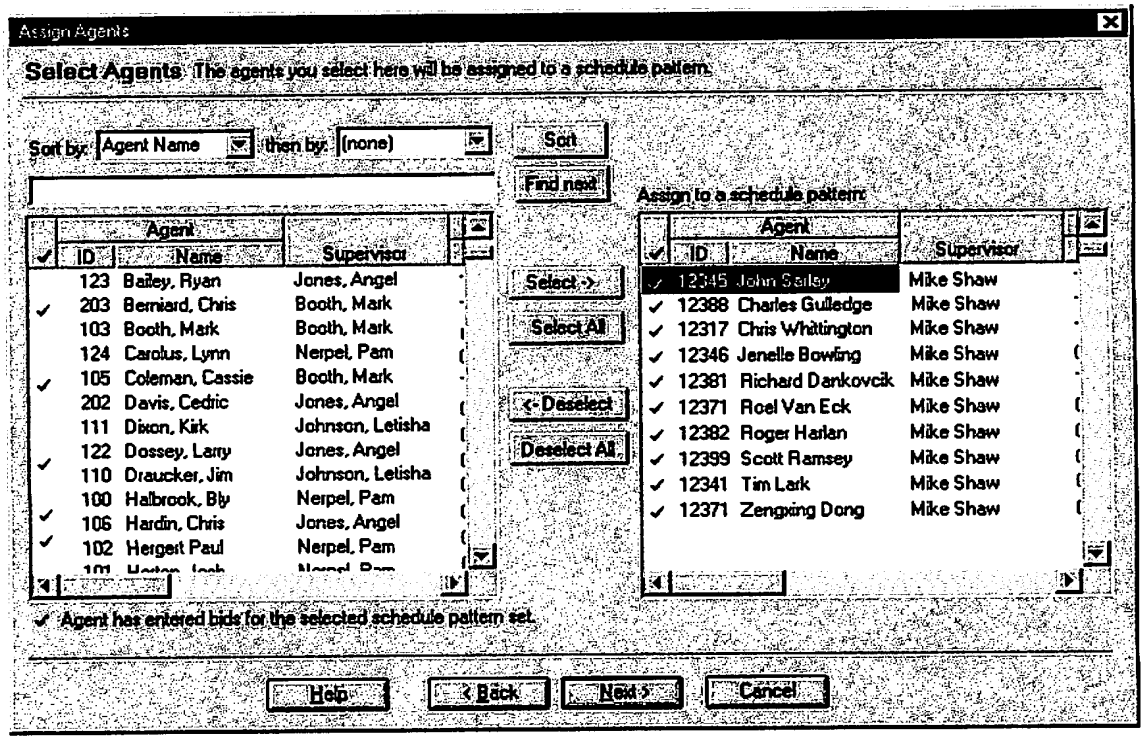


Figure 24 - Assign Agents Dialog - Select Agents View

This view of the dialog will be the same as the Select Agents view of the Create Active Schedules dialog, with the following exceptions.

- The agents that are included in this dialog will be those whose latest dbAgentMap records indicate they belong to the selected MU.

- The text at the top of the dialog will be "The agents you select here will be assigned to a schedule pattern."
- The Work Status column will not be shown in the list controls, and "Work Status" will not be a sort option. The only columns that will be shown in the list controls in this dialog will be agent ID, agent name, agent data value, seniority date, seniority extension, and rank.
- The checkmark column in the list controls will show a checkmark for agents who have at least one record in the dbPatternBids table for the selected schedule pattern set.
- The text below the master agent list will be "Agent has entered bids for the selected schedule pattern set."

Please see the functional specification for the Schedule Bidding feature (fe-00025) for more details about this dialog.

Please also note the column widths in the list controls and the alignment of the fields and buttons in this dialog. (e.g. agent name columns and agent data value columns should only be wide enough to accommodate 20 characters.)

6.6.2.1 Field Specifications

Sort by

- *Description* - The agent lists will be sorted by the column selected in this field.
- *Data Type* - Combo box
- *Alignment* - Left
- *Access Restrictions* - None
- *Maximum Width* - 14 ("Seniority Date")
- *Data Requirement* - Optional
- *Possible Values* - "Bid flag," "Agent ID," "Agent Name," column header of the Schedule Bidding agent data group, "Seniority Date," "Seniority Ext," "Rank," and "(none)"
- *Default Value* - "(none)"
- *Notes* - The "Bid flag" column corresponds to the column containing the checkmark.
- *Notes* - Selecting "(none)" in this field will not clear the field. The "then by" field will be set to "(none)" and disabled if "(none)" is selected in this field.
- *Notes* - The agent data list item will be omitted if no Schedule Bidding agent data group has been specified for the MU.

then by

- *Description* - The agent lists will be sub-sorted by the column selected in this field.
- *Data Type* - Combo box
- *Alignment* - Left
- *Access Restrictions* - This field will be disabled if "(none)" is selected in the "Sort by" field.
- *Maximum Width* - 14 ("Seniority Date")
- *Data Requirement* - Optional
- *Possible Values* - "Bid flag," "Agent ID," "Agent Name," column header of the Schedule Bidding agent data group, "Seniority Date," "Seniority Ext," "Rank," and "(none)"
- *Default Value* - "(none)"
- *Notes* - Selecting "(none)" in this field will not clear the field.
- *Notes* - The agent data list item will be omitted if no Schedule Bidding agent data group has been specified for the MU.

Sort button

- *Description* - Pressing this button will cause the two agent lists to be sorted by the selected column or columns.

Find text box

- *Description* - The user will be able to type an agent name in the text box above the agent list, and the highlight bar will move automatically to the line containing the specified text. The search will be performed in the list that is currently active.
- *Data Type* - Text
- *Alignment* - Left
- *Access Restrictions* - None
- *Possible Values* - The user may type any ASCII character in this box
- *Default Value* - Blank

Find next button

- *Description* - Pressing this button will cause the highlight bar to move to the next line that contains the text in the Find box. If no line below the currently *selected* line contains the specified text, then the highlight bar will move to the first line in the list that contains the text. The search will be performed in the list that is currently active.

Checkmark

- *Description* - If bids have been entered for an agent for the selected schedule pattern set, then a checkmark will be displayed in this column for the agent.
- *Data Type* - Checkmark bitmap
- *Alignment* - Center
- *Access Restrictions* - Read only
- *Possible Values* - This field will be blank if no bids have been entered for the schedule pattern set, otherwise the checkmark bitmap will be shown.

Agent ID

- *Description* - The agent IDs will be shown in this column.
- *Data Type* - Integer
- *Alignment* - Right
- *Access Restrictions* - Read only
- *Maximum Width* - 9
- *Possible Values* - ID of any agent who belongs to the MU, according to his or her latest dbAgentMap record.
- *Notes* - The user will be able to change the size of this column in both lists.

Agent Name

- *Description* - The agent names will be shown in this column.
- *Data Type* - String
- *Alignment* - Left
- *Access Restrictions* - Read only
- *Maximum Width* - 20 characters

Agent data value

- *Description* - The values assigned to the agents for the agent data group that has been selected for use with the Schedule Bidding feature will be shown here. The header of this column will be the specified agent data group's column header.
- *Data Type* - The agent data group's field type
- *Alignment* - Right for numeric, date, time, and money data types; left for alphabetical and logical data types
- *Access Restrictions* - Read only; this column will be hidden if no agent data group has been selected as the Schedule Bidding group
- *Maximum Width* - 20 characters
- *Possible Values* - Any value that is valid for the Schedule Bidding agent data group, or blank

Seniority Date

- *Description* - The agent seniority dates will be shown in this column
- *Data Type* - Date, formatted according to the PC settings with 4 digits for the year
- *Alignment* - Right
- *Access Restrictions* - Read only
- *Maximum Width* - 10
- *Possible Values* - Any valid date

Seniority Extension

- *Description* - The seniority date extensions will be shown in this column
- *Data Type* - Integer
- *Alignment* - Right
- *Access Restrictions* - Read only
- *Maximum Width* - 4
- *Possible Values* - 1-9999

Rank

- *Description* - Each agent's Rank will be shown in this column
- *Data Type* - Integer
- *Alignment* - Right

- *Access Restrictions* - Read only
- *Maximum Width* - 4
- *Possible Values* - 1-9999

Select

- *Description* - Pressing this button will move the agent(s) that are currently selected in the "master" agent list on the left out of that list and into the "assign" agent list on the right.

Select All

- *Description* - Pressing this button will move all of the agents from the master agent list into the schedule agent list.

Deselect

- *Description* - Pressing this button will move the agent(s) that are currently selected in the schedule agent list back into the master agent list.

Deselect All

- *Description* - Pressing this button will move all of the agents in the schedule agent list back into the master agent list.

Help

- *Description* - On-line help for the dialog will be displayed if the user presses the Help button.

Back

- *Description* - The initial view of the Assign Agents dialog will be displayed if the user presses the Back button. Changes that had been made to the agent selections will be retained. If the user were to press the Cancel button, then the changes would be lost, but returning to the initial view of the dialog will not cancel the changes.

Next

- *Description* - If all agents in the "assign" agent list have checks in the checkmark column, then when the user presses the Next button, the Finish view of the dialog will be displayed. If at least one agent in the "assign" agent list has not entered any bids for the selected schedule pattern set (i.e. if any agents in the list do not have a check in the checkmark column), then when the user presses the Next button, the following message will be displayed. "At least one of the selected agents has not entered bids for the schedule pattern set. Are you sure?" The message box will have a warning icon and Yes and No buttons. No will be the default. Pressing No will return focus to the Select Agents view of the dialog. If the user presses Yes then the Finish view of the dialog will be displayed.

Cancel

- *Description* - Pressing Cancel will close the dialog.

6.6.3 Finish View

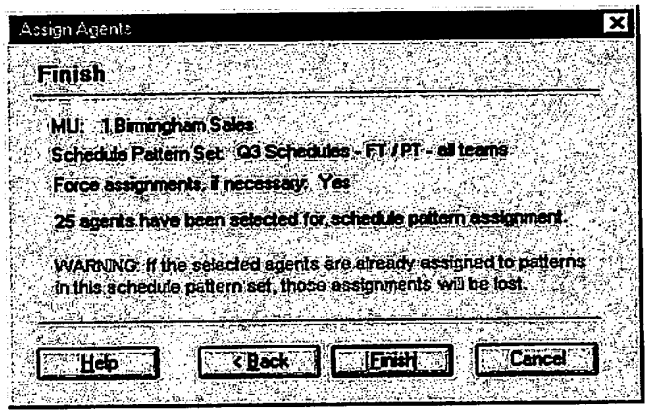


Figure 25 - Assign Agents Dialog - Finish View

The parameters that the user selected in the initial view of this dialog will be displayed in the "Finish" view, as shown above.

The number of agents that were selected will be displayed in the following format. "<number of selected agents> agents have been selected for schedule pattern assignment." In addition, the following warning message will be displayed in red text. "WARNING: If the selected agents are already assigned to patterns in this schedule pattern set, those assignments will be lost."

Help

- *Description* - On-line help will be displayed when the user presses Help.

Back

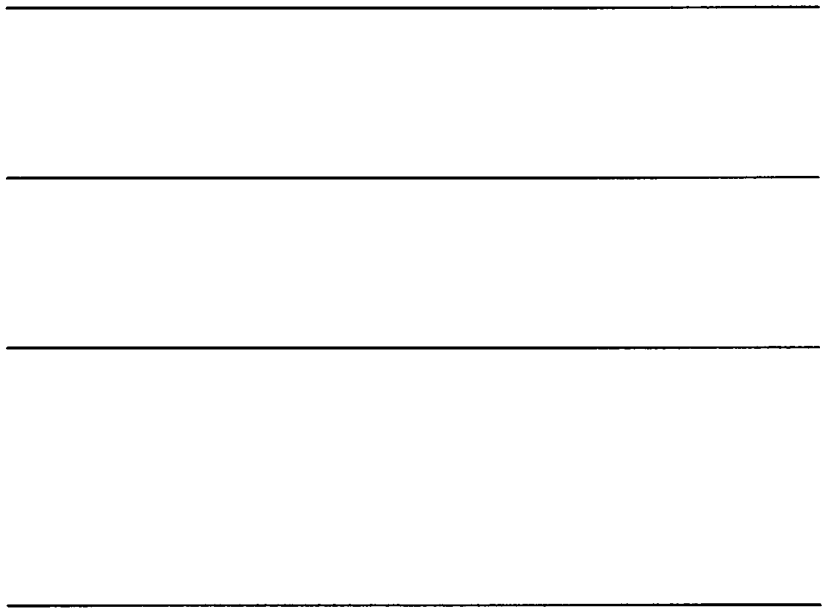
- *Description* - The "Select Agents" view of the dialog will be displayed if the user presses the Back button.

Finish

- *Description* - When the user presses Finish, the agents will be assigned to schedule patterns as described in Section 5.2, "Agent Assignment Program" on page 11.

Cancel

- *Description* - Pressing Cancel will close the dialog, and no changes will be made.



7 Agent WebStation Interface

7.1 Navigation Bar

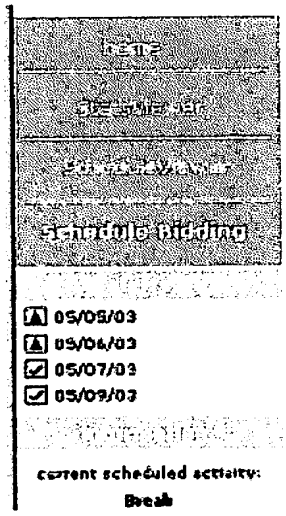


Figure 28 - Navigation Bar

If the WebStation Schedule Bidding feature is enabled for the customer, and if the MU allows schedule bidding in the Agent WebStation (i.e. if the MU's dbMUSchedBidRules **biddingAllowed** field is True), then a Schedule Bidding link will be available in the Agent WebStation, as shown above. [23002.Aws.MU Access]

7.2 Schedule Bidding "Home" Page

Clicking on the Schedule Bidding link in the navigation bar will display the following Schedule Bidding "Home" page. In this page, the agent will choose the set of schedule patterns for which he or she would like to view and modify bids.
[23002.Aws.1SchPatternSet]

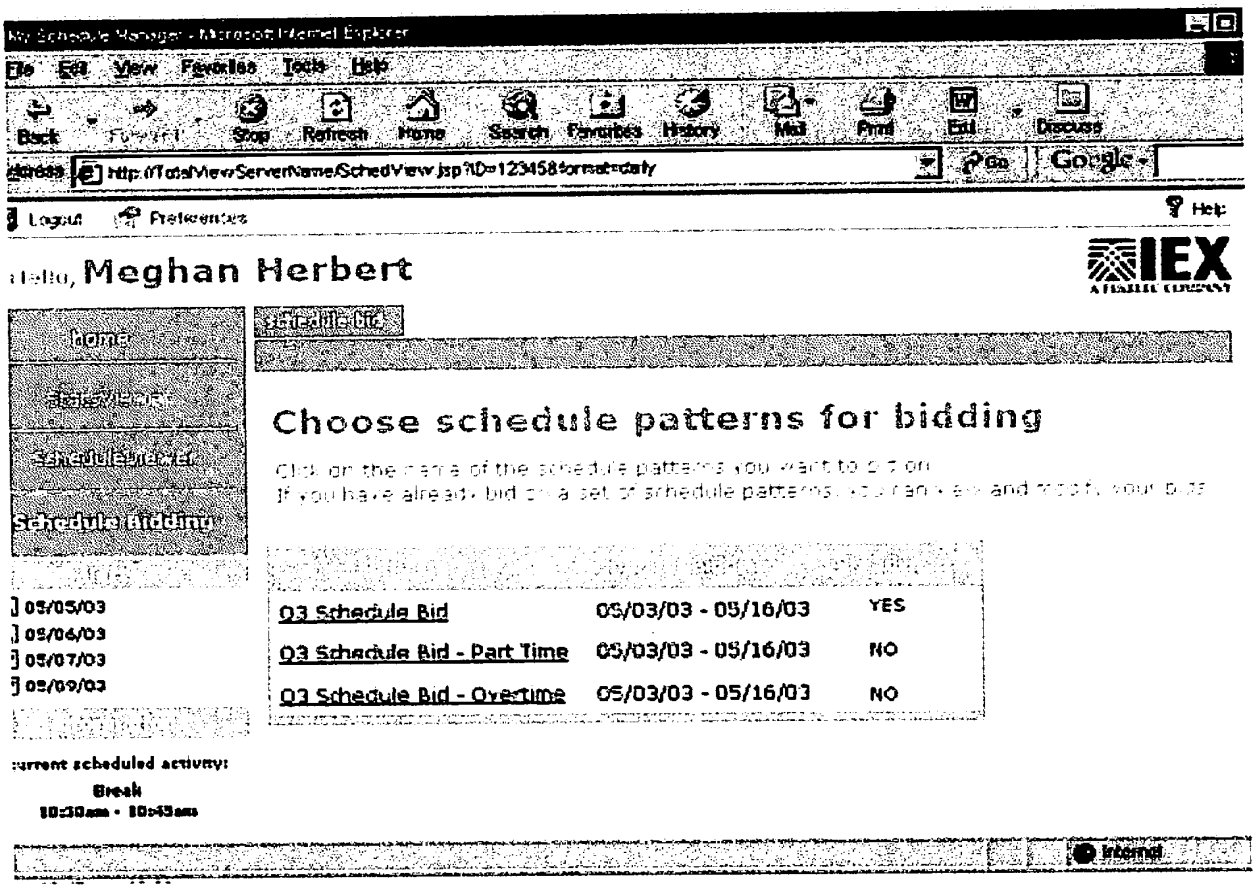


Figure 29 - Schedule Bidding "Home" Page

7.2.1 Screen appearance

Each of the schedule pattern sets that are open for bidding in the agent's MU will be listed here. [23002.Aws.OnlyOpenSets] All open schedule pattern sets will be listed, even if they do not contain any schedule patterns for which the logged-in agent is eligible for bidding. (That is, the patterns contained in each pattern set will not be validated for this agent in order to determine what is shown in this page and what is not.)

A schedule pattern set will be considered "open" for bidding if the dbSchedBidParams table contains a record for the schedule pattern set in which the **bidStartDate** is the same as or earlier than the current date and the **bidEndDate** is the same as or later than the current date.

If no schedule pattern sets are currently open for bidding in the MU, then the following text will be shown, in place of the table and the help text in this page. "There are no schedule patterns open for bidding at this time."

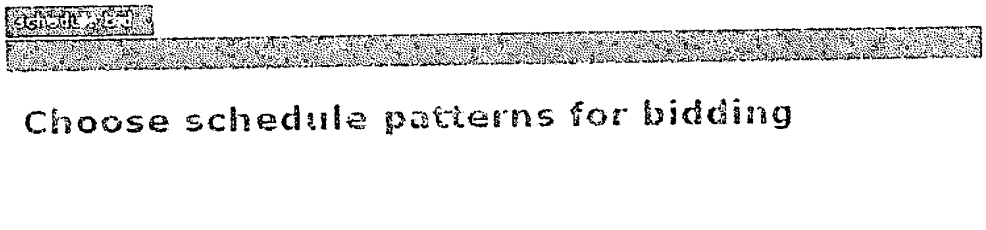


Figure 30 - Schedule Bidding "Home" Page - No patterns open

At least one tab, labeled "schedule bid", will be displayed at the top of each Schedule Bidding page. If, in the future, additional Schedule Bidding features are added, then additional tabs may be displayed. Clicking on the "schedule bid" tab will have no affect.

Alternating rows in table shown in this page will use the light background color (the light color in the selected color scheme will be used).

The text in the table on this page will be shown in black, using Verdana Ref font, size 10. (Note: This is a larger font than is used in tables on other Agent WebStation pages.)

7.2.2 Field Specifications

header

- *Description* - The following header text will be shown at the top of this page. "Choose schedule patterns for bidding"
- *Font* - This text will be shown in the selected color scheme's dark color, using Verdana font, size 18.

help text

- *Description* - The following help text will be shown below the header. "Click on the name of the schedule patterns you want to bid on. If you have already bid on a set of schedule patterns, you can view and modify your bid."
- *Font* - This text will be shown in the selected color scheme's main highlight color (e.g. orange, in the example above), using Verdana Ref font, size 10.

Schedule Patterns

- *Description* - The titles of the schedule pattern sets that are currently open for bidding in the agent's MU will be listed here. The schedule pattern set names will not be used; the title that is stored in the dbSchedBidParams table will be shown.

- *Data Type* - Link: Clicking on the schedule pattern set title will display the Schedule Bidding page for the selected schedule pattern set. See "Schedule Bidding Page" on page 80.
- *Alignment* - Left
- *Maximum Width* - 40 characters

Open for bidding

- *Description* - The date range for which the schedule pattern set is open for bidding will be listed here.
- *Data Type* - Date range, formatted as "<bidStartDate> - <bidEndDate>"; dates will be shown in short date format.
- *Alignment* - Left
- *Access Restrictions* - Read only

Already bid

- *Description* - If the logged-in agent has already entered bids for one or more weekly patterns in the schedule pattern set (that is, if one or more records exist in dbPatternBids for the agent for this schedule pattern set), then the text in this field will be YES; otherwise this field will show NO.
- *Data Type* - String
- *Alignment* - Center
- *Access Restrictions* - Read only
- *Notes* - The agent will be able to view and modify bids that he or she has already entered for a schedule pattern set, as long as it is open for bidding. [23002.Aws.View/Modify]

7.3 Schedule Bidding Page

The set of schedule patterns selected by the user will be displayed as shown below. In this page, the agent will be able to enter bids for the weekly schedule patterns that belong to the schedule pattern set. An agent will only be allowed to enter bids for weekly patterns to which he or she has permissions. (Permissions are based on the pattern type assignments and agent data value assignments.) [23002.Aws.bid]

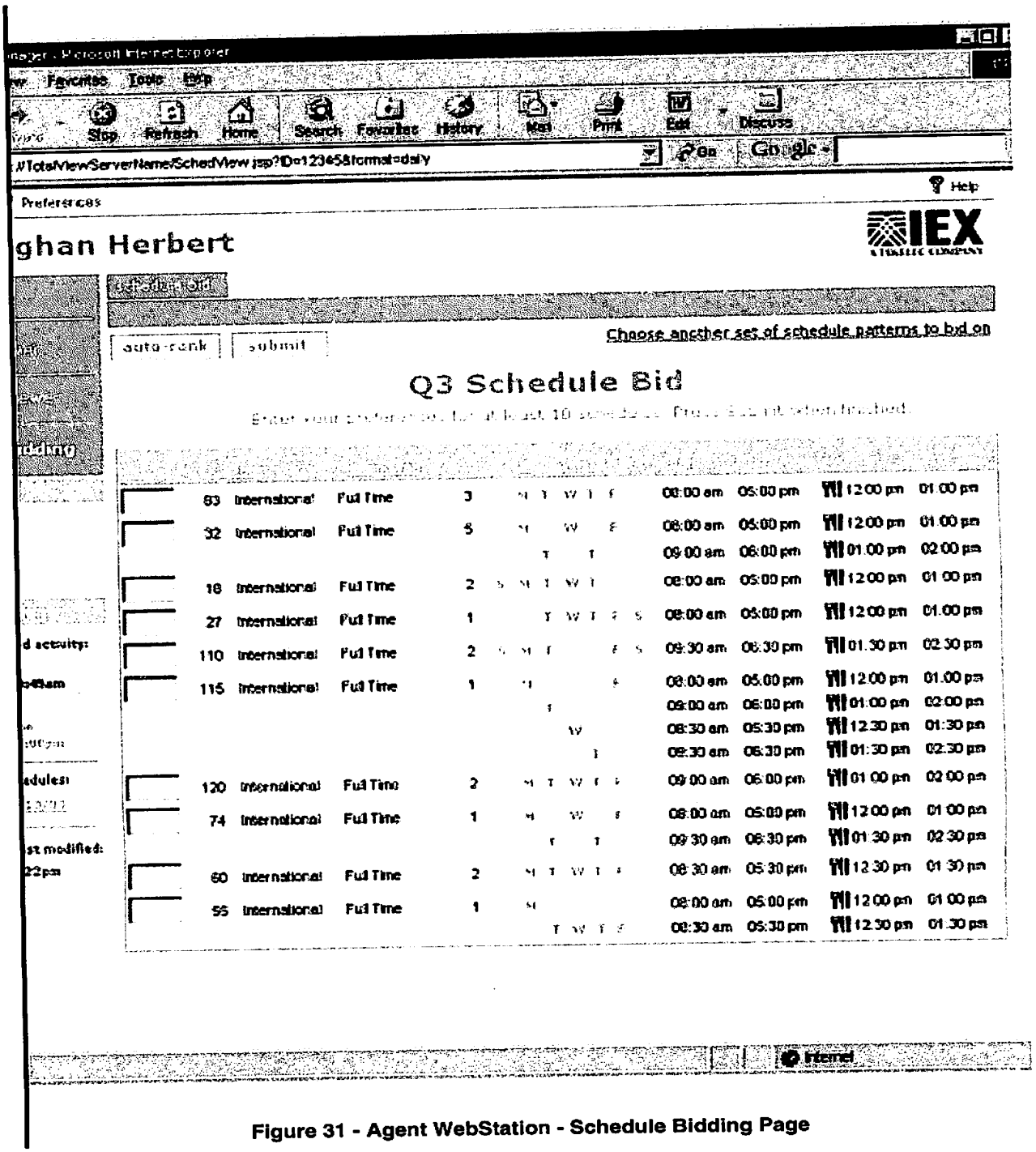


Figure 31 - Agent WebStation - Schedule Bidding Page

7.3.1 Screen Appearance

- Alternating background colors will be used between weekly schedule patterns. The background color of all rows associated with the same weekly schedule pattern will be the same. Alternating rows in this screen will be shown with a light background color (the light color in the selected color scheme will be used).
- Each weekly pattern that is to be shown will be printed one time only.
- Other than the Bid field, a data item will only be shown if the schedule patterns set's bid rules indicate that it is to be shown. The Bid column will always be shown. (The supervisor will not be able to open a set of schedule patterns for bidding without specifying at least one column to be shown.) [23002.Aws.Fields]
- Data items will be shown in the order they are specified in Section 7.3.4, "Field Specifications" on page 85.
- Data will only be shown for the exception codes specified by the user. It is possible for the user to have specified exception codes to be shown without specifying any exception code fields (start time, end time, or length). In this case, only the icons will be shown. It is also possible for the user to have selected one or more exception code fields without selecting any exception codes to be shown. In this case, no exception code data will be shown. [23002.AWS.EXCCODES]
- Data will only be shown for the days of the week specified by the user. If no days of the week were specified, then no daily pattern data will be shown. [23002.Aws.Days]
- Days of the week will be ordered beginning with the MU's first day of the week.
- The initial sort order of the patterns will be by start time for the first day of the week, sub-sorted by start time for the second day of the week.
- The table containing the pattern data will be as wide as necessary to show all of the information without wrapping.

7.3.2 Weekly Schedule Patterns

A weekly schedule pattern that belongs to the schedule pattern set will only be shown in this page if it meets the following criteria.

- The pattern type that is assigned to the pattern is selected as a filter. That is, either a record exists in dbFilterPatterns that corresponds to the pattern's assigned type, or all pattern types are to be shown. A blank value will be treated as a specific pattern type. That is, if no pattern type is assigned to the pattern, then a blank value must have been specified as a filter, or all pattern types must be shown.
- Either the logged-in agent has permission to bid on the assigned pattern type, (again, a blank value will be treated as a specific pattern type), or the supervisor has specified that pattern type permissions are not to be used. (i.e. the dbMUSchedBidRules **usePatternTypePerms** field is False.) [23002.Aws.OnlyMatchingPatterns]

- The agent data value that is assigned to the pattern is selected as a filter. That is, either a record exists in dbFilterPatterns that corresponds to the pattern's assigned value, or all agent data values are to be shown. A blank value will be treated as a specific agent data value.
    - **Note:** If no Schedule Bidding agent data group has been specified for the MU, (that is, if no agent data group's **schedBidding** field is 'Yes' for the MU) then this condition will not be used to filter schedule patterns.
- Either the logged-in agent is assigned the same agent data value as the pattern, (again, a blank value will be treated as a specific pattern type), or the supervisor has specified that the agent data value assignments are not required to match. (i.e. the dbMUSchedBidRules **matchAgtData** field is False.) [23002.Aws.OnlyMatchingPatterns]
    - **Note:** The MU's Schedule Bidding agent data group will be used in determining agent data value assignments. If no Schedule Bidding agent data group has been specified, then this condition will not be used to filter schedule patterns.
- The weekly pattern's **revSlots** value is greater than the number of agents that are currently assigned to it, and the supervisor has indicated that patterns with available slots are to be shown. [23002.Aws.Available]
- The weekly pattern's **revSlots** value is equal to the number of agents that are currently assigned to it, and the supervisor has indicated that patterns with no available slots are to be shown. [23002.Aws.Unavailable]

If no weekly schedule patterns in the schedule pattern set meet the above criteria, then there will be nothing for the agent to bid on. In this case, the text "There are no schedule patterns available for you to bid on in this schedule pattern set." will be shown on this page. The table, the agent instructions, and the "auto-rank" "submit" and "cancel" buttons will all be hidden. The following link will be shown: "Choose another set of schedule patterns to bid on" Clicking this link will display the Schedule Bidding "Home" page.

Q3 Schedule Bid

There are no patterns available for you to bid on in this schedule pattern set.

Choose another set of schedule patterns to bid on

Figure 32 - Bid Page - No Weekly Patterns

7.3.3 Pattern Display

Daily schedule patterns associated with the same weekly schedule pattern will always be shown together. The earliest day of the week for which the weekly schedule pattern has a daily schedule pattern will be listed first. Days of the week for which no daily schedule pattern exists will not be shown.

Exception code data for each daily pattern will be shown in chronological order, beginning with the earliest exception in the pattern. Data will only be shown for the exception codes specified by the user. Exception code data will be shown in as many columns as necessary on each row. A single column will not necessarily contain data for a single type of exception code. For example, if data for the Break and Lunch exceptions are to be shown, then one daily pattern may have a succession of exception codes as follows: Break, Lunch, Break, whereas another pattern may have a different succession of exception codes, such as Break, Break, Lunch, Break. In this case, the data for the two patterns would be shown as follows.

Pattern	Col 1	Col 2	Col 3	Col 4
1	Break	Lunch	Break	
2	Break	Break	Lunch	Break

The daily schedule patterns that belong to a weekly schedule pattern will be combined, if possible, and shown one time. Daily schedule patterns that are alike with respect to the data being displayed will be combined. The daily schedule pattern data items that can be displayed are pattern start times, pattern end times, exception code start times, exception code end times, and exception code lengths. If two daily patterns within the same weekly pattern have the same values for all of the daily pattern fields being displayed, then the pattern will be shown one time and both of the days of the week will be marked for that pattern.

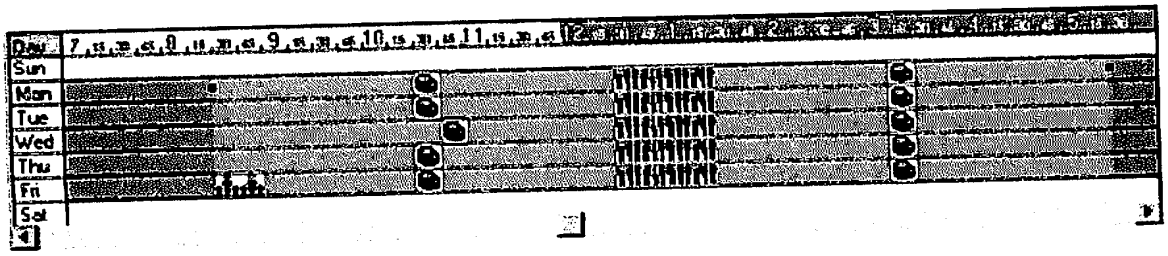


Figure 33 - Example - Combining Daily Schedule Patterns

Using the weekly schedule pattern example above, the days of the week would be combined as shown in the table below, based on the user's field selection and exception code selection. Rows that would have been exactly alike if shown separately (other than the day of week column), will be combined.

Selected Fields	Selected Codes	Daily Pattern Combinations
Pattern Start Times Pattern End Times Exception Code Start Times Exception Code End Times	Lunch	S M T W T F S Start End Start End M T W T F 8:30 5:30 L 12:30 1:30
Pattern Start Times Pattern End Times Exception Code Start Times Exception Code End Times	Lunch Break	S M T W T F S Start End Start End Start End Start End M T T F 8:30 5:30 B 10:30 10:45 L 12:30 1:30 B 15:15 15:30 W 8:30 5:30 B 10:45 11:00 L 12:30 1:30 B 15:15 15:30
Pattern Start Times Pattern End Times Exception Code Lengths	Lunch Break	S M T W T F S Start End Length Length Length M T W T F 8:30 5:30 B 00:15 L 01:00 B 00:15
Pattern Start Times Pattern End Times Exception Code Start Times	Lunch Break Meeting	S M T W T F S Start End Start Start Start Start M T T 8:30 5:30 B 10:30 L 12:30 B 15:15 W 8:30 5:30 B 10:45 L 12:30 B 15:15 F 8:30 5:30 M 8:30 B 10:30 L 12:30 B 10:30

Table 11 - Example - Combining Daily Schedule Patterns

7.3.4 Field Specifications

title

- *Description* - The title of the schedule pattern set (as specified in the dbSchedBidParams table) will be shown centered at the top of this page. [23002.AWS.TITLE]
- *Font* - This text will be shown in the selected color scheme's dark color, using Verdana font, size 18.

instructions

- *Description* - The instructions specified for the schedule pattern set will be shown centered below the title. [23002.Aws.Instructions]
- *Font* - This text will be shown in the selected color scheme's main highlight color (e.g. orange, in the example above), using Verdana Ref font, size 10.

auto-rank

- *Description* - Pressing this button will populate the Bid field for each of the schedule patterns that is currently displayed, as described in Section 7.3.5.2, "User presses the auto-rank button" on page 91.

submit

- *Description* - Pressing this button will validate and submit the agent's bids for the schedule pattern set, as described in Section 7.3.5.3, "User presses the submit button" on page 92.

Choose another set of schedule patterns to bid on

- *Description* - Clicking this link will return the user to the Schedule Bidding "home" page, without saving the agent's bids.

Bid

- *Description* - The user will indicate the order of his or her preferred schedule patterns by typing a number next to each one. This field may also be populated automatically by pressing the auto-rank button. [23002.Aws.EnterPrefs]
- *Data Type* - Integer
- *Alignment* - Right
- *Access Restrictions* - None
- *Maximum Width* - 4
- *Data Requirement* - Optional
- *Possible Values* - 1-9999; the agent's bids for each of the currently displayed patterns must be unique.
- *Default Value* - Blank
- *Notes* - If the agent had already submitted bids for the currently selected schedule pattern set, then the previously entered bids will be displayed in the Bid fields when the agent opens this page.

ID

- *Description* - ID of the weekly schedule pattern
- *Data Type* - Integer
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 4
- *Possible Values* - 1-9999
- *Notes* - This field will only be shown one time per weekly schedule pattern.

agent data value

- *Description* - This is the agent data value that is assigned to the weekly schedule pattern. The header of this column will be the column header defined for the MU's Schedule Bidding agent data group.
- *Data Type* - Combo box
- *Alignment* - Left
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 20 characters
- *Possible Values* - Blank or any 20 character string.
- *Notes* - This field will only be shown one time per weekly schedule pattern.

Pattern Type

- *Description* - The pattern type that is assigned to the weekly schedule pattern.
- *Data Type* - String
- *Alignment* - Left
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 20 characters
- *Possible Values* - Blank or any 20 character string.
- *Notes* - This field will only be shown one time per weekly schedule pattern.

Total Hours

- *Description* - This is the total length of the daily schedule. In the case of a split-schedule, each segment's length will be calculated and the sum of the segment lengths will be shown here.

  If the daily pattern displayed on this row applies to more than one day of the week, then the daily pattern's total hours will be multiplied by the number of days to which the pattern applies and the result will be shown in this column.
- *Data Type* - Time value, formatted as HH:MM
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 6

- *Possible Values* - 00:05 - 168:00

Paid Hours

- *Description* - This is the amount of time in the daily schedule for which paid exceptions exist. A paid exception is one whose **paid** field (in dbExcept) is set to 'Paid'.

  If the daily pattern displayed on this row applies to more than one day of the week, then the daily pattern's paid hours will be multiplied by the number of days to which the pattern applies and the result will be shown in this column.

- *Data Type* - Time value, formatted as HH:MM
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 6
- *Possible Values* - 00:00 - 168:00

Total Slots

- *Description* - This is the number of slots assigned to the weekly pattern. (This is the **revSlots** value in dbWeeklyPattern.)
- *Data Type* - Integer
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 4
- *Possible Values* - 1-9999
- *Notes* - This field will only be shown one time per weekly schedule pattern.

Assigned Slots

- *Description* - This is the number of agents that are currently assigned to the weekly schedule pattern.
- *Data Type* - Integer
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 4

- *Possible Values* - 0-9999
- *Notes* - This field will only be shown one time per weekly schedule pattern.

Avail Slots

- *Description* - This is the total number of slots that are currently unassigned for the weekly pattern. (Total Slots - Assigned Slots).
- *Data Type* - Integer
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 4
- *Possible Values* - 0-9999
- *Notes* - This field will only be shown one time per weekly schedule pattern.

S, M, T, W, T, F, S

- *Description* - The days of the week for which the daily pattern on this row apply will be marked with the first letter of the day of the week.
- *Data Type* - Character
- *Alignment* - Center
- *Access Restrictions* - Read only; a day of week column will only be shown if the schedule patterns set's bid rules indicate that that day of the week is to be shown.
- *Maximum Width* - 1
- *Possible Values* - S, M, T, W, T, F, S

(pattern) Start

- *Description* - This is the start time of the daily pattern.
- *Data Type* - Time, formatted using the short time format
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 8
- *Possible Values* - Any time of the day

(pattern) End

- *Description* - This is the end time of the daily pattern.
- *Data Type* - Time, formatted using the short time format
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 8
- *Possible Values* - Any time of the day

exception icon

- *Description* - If an exception code exists in the daily pattern that was selected to be shown in the Agent WebStation, then the icon will be shown here, followed by any exception code fields that had been selected for display (start time, end time, length).

  If other exception codes that are to be displayed exist in the daily pattern, then they will be listed across the page; all of the information associated with one exception will be printed before the next exception is printed.

(exception) Start

- *Description* - This is the start time of the exception code.
- *Data Type* - Time, formatted using the short time format
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 8
- *Possible Values* - Any time of the day

(exception) End

- *Description* - This is the end time of the exception code.
- *Data Type* - Time, formatted using the short time format
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 8

- *Possible Values* - Any time of the day

(exception) Length

- *Description* - This is the length of the exception code.
- *Data Type* - Time value, formatted as HH:MM
- *Alignment* - Right
- *Access Restrictions* - Read only; this column will only be shown if the schedule patterns set's bid rules indicate that it is to be shown.
- *Maximum Width* - 5
- *Possible Values* - 00:05 - 24:00

7.3.5 Screen Events and Processing

7.3.5.1 User clicks a column header

The first time the user clicks a column header, the data in the table will be sorted in ascending order by the selected column. If the user clicks the same column header again, then the table will be re-sorted in descending order by that column. [23002.Aws.Sort]

If the user clicks a day of week column header, then the data will be sorted by the corresponding day of the week's schedule start times. For example, if the user clicks the 'M' (Monday) column header, then the weekly schedule patterns will be sorted by Monday start times. This is true even if the start time column is not displayed.

When the data in the table are sorted, the order of the daily patterns within a weekly pattern will not be changed. The daily pattern that corresponds to the first day of the week will always be shown first, if one exists, followed by the second day of the week's daily pattern, and so on.

The agent will not be able to click on the Start and End columns for sorting, since these times are specific to a day of the week.

7.3.5.2 User presses the auto-rank button

If the user presses the auto-rank button, then all weekly patterns for which the Bid field is currently blank will be populated with the next available bid value, beginning with 1. Bid fields will be populated in their current order.

If a value has already been specified in another Bid field, then that value will be skipped; the same value cannot be assigned to two weekly schedule patterns.

Bid fields that are already populated will not be changed.

7.3.5.3 User presses the submit button

When the user presses the submit button, the Bid fields will be validated. The agent is not required to populate all of the bid fields, however, the values in the Bid fields cannot be duplicated.

If any two Bid fields contain the same value, then the following message will be displayed before the form is submitted. "The Bid value entered for each schedule pattern must be unique." Focus will be returned to the first of the duplicate Bid fields.

If no duplicates are found, then the form will be submitted and the agent's bids will be stored in the dbPatternBids table.

A page will be shown with the schedule pattern set title, as in the previous page, and the following text. "Your bid has been submitted successfully." The following link will be available on this page: "Choose another set of schedule patterns to bid on" Clicking this link will display the Schedule Bidding "home" page. (See "Schedule Bidding "Home" Page" on page 77.)

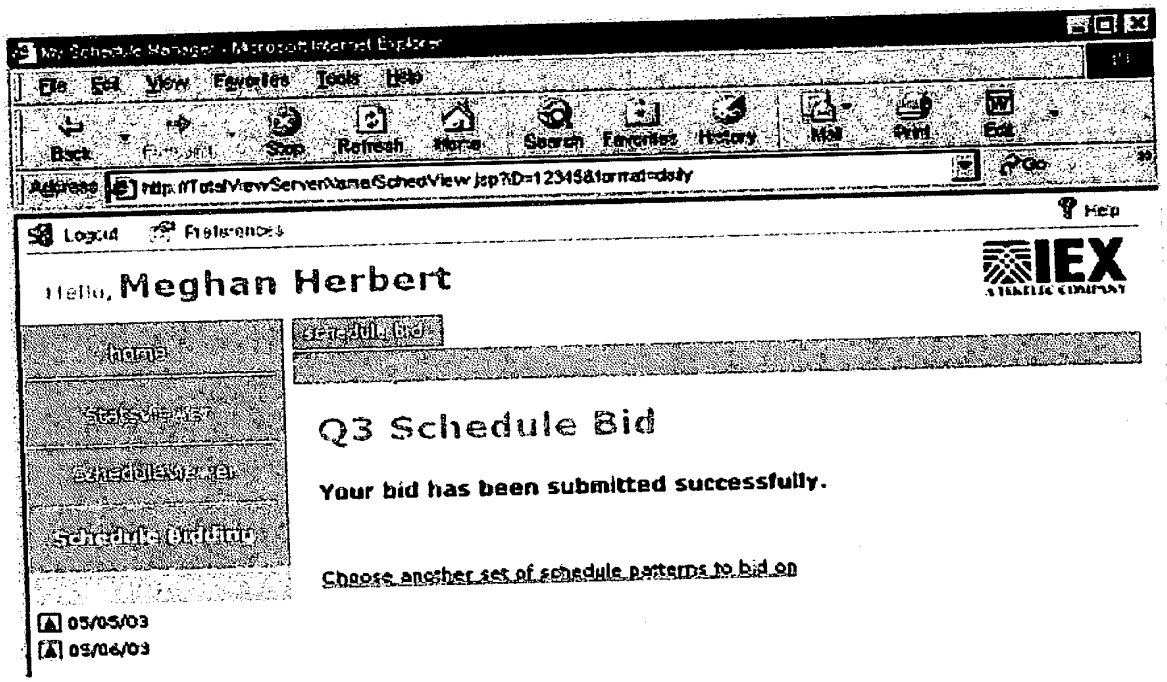
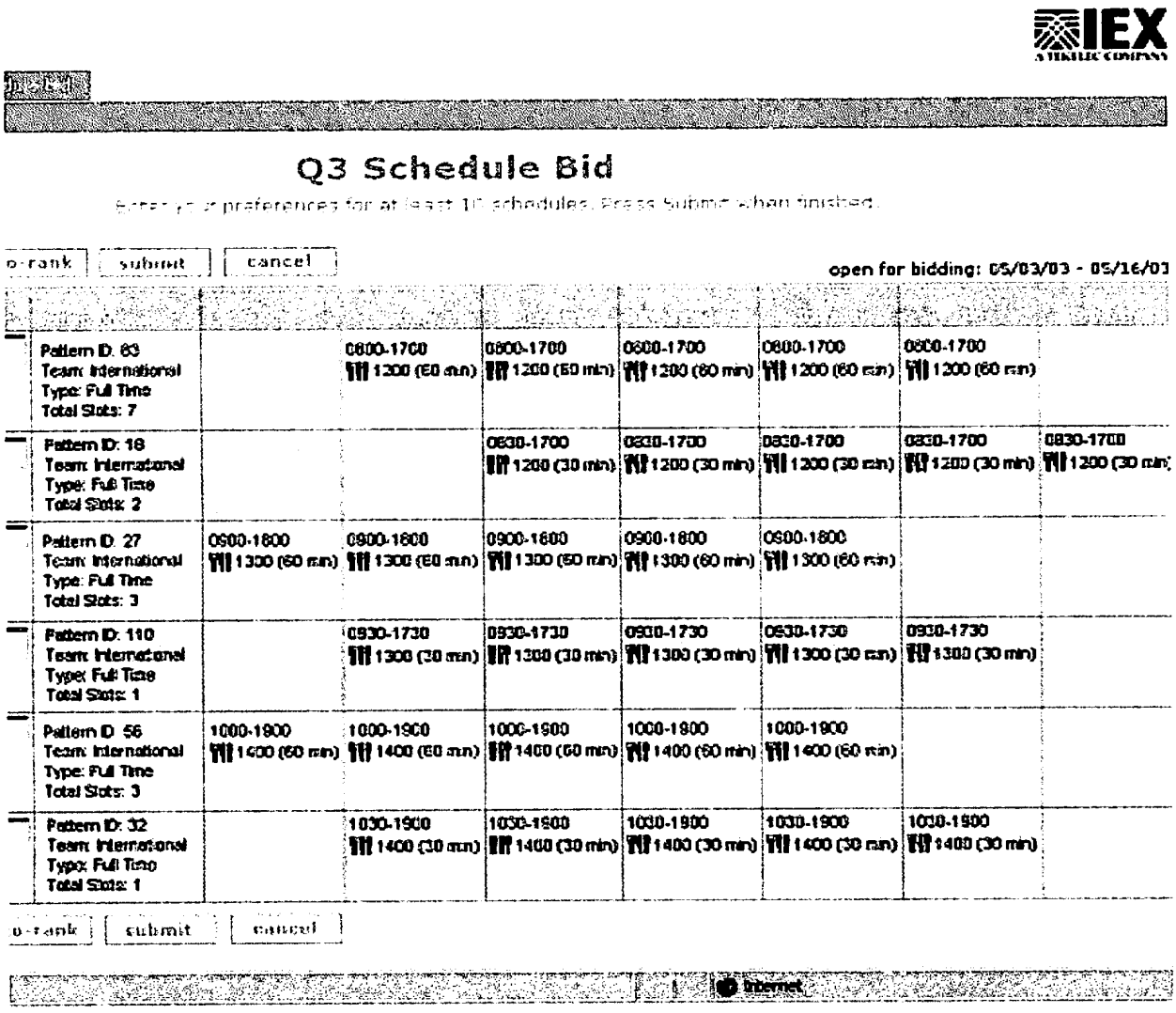


Figure 34 - Submit Successful page

7.4 On-line Help

On-line help will be updated as necessary for the changes made in the Agent WebStation. [23002.online.help]



Q3 Schedule Bid

Enter your preferences for at least 10 schedules. Press Submit when finished.

e-rank | submit | cancel

open for bidding: 05/03/03 - 05/16/03

Pattern ID: 63 Team: International Type: Full Time Total Slots: 7		0800-1700 1200 (60 min)	0800-1700 1200 (60 min)	0800-1700 1200 (60 min)	0800-1700 1200 (60 min)	0800-1700 1200 (60 min)	
Pattern ID: 18 Team: International Type: Full Time Total Slots: 2			0830-1700 1200 (30 min)	0830-1700 1200 (30 min)	0830-1700 1200 (30 min)	0830-1700 1200 (30 min)	0830-1700 1200 (30 min)
Pattern ID: 27 Team: International Type: Full Time Total Slots: 3	0900-1600 1300 (60 min)	0900-1600 1300 (60 min)	0900-1600 1300 (60 min)	0900-1600 1300 (60 min)	0900-1600 1300 (60 min)		
Pattern ID: 110 Team: International Type: Full Time Total Slots: 1		0930-1730 1300 (30 min)	0930-1730 1300 (30 min)	0930-1730 1300 (30 min)	0930-1730 1300 (30 min)	0930-1730 1300 (30 min)	
Pattern ID: 56 Team: International Type: Full Time Total Slots: 3	1000-1900 1400 (60 min)	1000-1900 1400 (60 min)	1000-1900 1400 (60 min)	1000-1900 1400 (60 min)	1000-1900 1400 (60 min)		
Pattern ID: 32 Team: International Type: Full Time Total Slots: 1		1030-1900 1400 (30 min)	1030-1900 1400 (30 min)	1030-1900 1400 (30 min)	1030-1900 1400 (30 min)	1030-1900 1400 (30 min)	

e-rank | submit | cancel

Internet

Index of Cross References